VENTILATION OF MINES. — At the late meeting of the British Association, at Swansea, Mr. P. Struve read a description of a new mine ventilator, wherein he proposes to substitute for the present system of furnaces a ventilator worked by a five-horse power engine, calculated to take out of a mine an unlimited quantity of air. This he does by converting the whole area of the upcast pit into an air channel, which he connects with his ventilator by means of a culvert of a similar size. The ventilator consists of two large air chambers, something like gasometers, which he causes to move up and down in water contained in a tank constructed of masonry; the chambers balance each other, and are surrounded with outside cases so as to form double pumps: the inlet and outlet valves, when open, present the same amount of area for the ingress and egress of the air as the upcast pit, so that the only resistance to be overcome in ventilating the mine is what arises from the friction of the air in the passages of the mine and in the parts of the apparatus, which would be of small amount. He described one now erecting on this principle at the Eagle's Bush Colliery, calculated to pass through that mine 40,000 cubic feet per minute, the cost of which would be about 4,000*l.*

THE ROYAL STABLES AT WINDSOR CASTLE.—Sir, observing that the book you quoted states that the walls of the Riding House which had been affected by the *dry-rot* had recently been covered with "a composition of saw-dust and india rubber," — perhaps you will pardon me for saying, that if "*saw-dust*" had been a component part of the composition the dry rot would again attack the building, from the capillary attraction in the wood saw-dust. The covering which is alluded to is a mechanical combination of prepared cork and caoutchouc, called "kamptulicon," from the Greek words kamptos (flexible) and ulikos (material), both non-absorbents. The kamptolite (or elastic stone) pavement laid down in the Admiralty court-yard is an entirely different composition, worked under a separate patent, and has long been the prey of *lawyers* in a chancery suit, to the serious injury of all concerned, more especially your obedient servant, GEORGE WALTER.

TENDERS

For St. Marylebone Baths, &c.; Mr. Christopher Eales, Architect:—

Smith	£10,146	9	0
Fry and Son	9,916	14	8
Beeham and Co.	9,918	5	0
Howard and Stanns	9,647	0	0
Cooper	9,322	0	0
Higgs	9,439	0	0
[illegible]	9,407	0	0
Piper	9,367	0	0
Burton	9,215	0	0
Holland	9,129	0	0
Patrick	9,570	0	0
Haynes and Co.	8,941	15	10

TO CORRESPONDENTS.

"*Varnish.*" — "The least coloured varnish is that of copal." (Graham.) It is generally prepared by melting the resin, mixing it while hot with a little drying oil, and adding gradually oil of turpentine, in quantity equal to the resin. "When copal is dissolved in any volatile liquid, and spread thin upon wood, metal, paper, &c., so that the volatile menstruum may evaporate, the copal remains perfectly transparent, and forms one of the most beautiful and perfect varnishes that can well be conceived."—(*Edinburgh Encyclopædia.*)

"*Constant Subscriber*" (Ipswich). — Keene's cement would probably answer the purpose.

"*W. H.*"—We cannot undertake to pronounce on the correctness of estimates. In the present case, however, we may say that there seems no reason why the work required should exceed the sum named.

"*Chris.*"—Herr Zwirner is the architect: address, Cologne Cathedral.

"*A Non-Sold, Architecturally-Educated Practitioner.*"—A simple denial of any statement, by any anonymous writer, is, of course, worth nothing. There are many able and honourable men in the class he defends, and there are many who are otherwise.

"*Architect*" (Sunderland), will see the proper course marked out in our leading article.

"*T. R. M.*"—We shall be happy to look at anything which is sent, but do not promise to make use of it.

"*L. R.*"—If a copy be forwarded it shall be looked to.

Received.—"J. P." "J. T." "G. T. D." "X." "P. A." "J. B." "Grim." "P. N." "B. V." "W. J. H." "H. H." "B. B." "S. M." "G. W." "E. R." "S. H." "B. C." "A Brassier." "G. P." "Subscriber" (Liverpool). "J. N." (Redford), we have not time to comply. "The Geometrical Mosaic of the Middle Ages, with Notes of Notice of the Art," by M. D. Wyatt, Architect (Day and Son, 17, Gate-street, Lincoln's-Inn Fields); "Rambles about Bath and its Neighbourhood," by James Tunstall, M.D., 2nd edit. (London, Simpkin and Marshall—M. Pocock, Bath); "Condition of the Working Classes," by H. G. Cooper (London, Groombridge and Sons); "Descriptive Atlas of Astronomy," by Rev. Thos. Milner, Part V. (Orr and Co.); "The Man in the Moon," for September; "Dolman's Magazine," &c.

"*Books and Addresses.*"—We have not time to point out books or find addresses.

ADVERTISEMENTS.

TO DRAUGHTSMEN AND CIVIL ENGINEERS.

H. MORRELL, BLACK LEAD PENCIL MANUFACTURER, No. 149, Fleet-street, London. These Pencils are prepared in various degrees of hardness and shading.

H H H for drawing on wood.	F F light and shading.
H H H for architectural use.	F for general use.
H H for engineering.	B black for shading.
H for sketching.	B B ditto ditto.
H B hard and black for drawing.	B B B ditto ditto.
M medium.	B M B ditto ditto.

Sold by all the principal Stationers in town or country.

IRON ROOFING WORKS, SOUTHWARK.—JOHN H. PORTER, manufacturer of Iron Roofs and Buildings, Iron Hurdles, and other fences, and iron work generally. Lists of prices and estimates furnished upon application.—Office, 4, Adelaide-place, London-bridge, City.

NAILS and IRONMONGERY from BIRMINGHAM.—To BUILDERS, ARCHITECTS, &c.—Nails, Locks, and every description of Builders' Ironmongery, of the best quality, supplied at the lowest Birmingham prices, by FREDERICK BLYTH, Patent Cut Nail Manufacturer and General Factor, Edmund-street, Birmingham. Lists of prices for warded upon application.

CAMDEN TOWN.—R. FULKES'S RANGE and STOVE MANUFACTORY, 81, Park-street.

Elliptic Stoves, 3d. per inch	Register Stoves, 6d. per inch.
Self-acting Ranges, with Oven and Boiler and Revolving Shelves, 3 ft., £3 15s.; 3 ft. 6 in., 40s.	Chimney Bars, 1lb. per cwt.
Coppers, 4s. 3d. per lb.	Bush-weights, 2s. 6d. per cwt.

Builders' Ironmongery of all descriptions equally low.

OLD-ESTABLISHED WHOLESALE IRONMONGERY WAREHOUSE, Kitchen-range, and Stove-grate Manufactory 18, Cross-street, Walworth.

JOHN GRICE most respectfully solicits the attention of Architects, Builders, and Carpenters, to his Stock of Black and Bright Stoves, Kitchen Ranges, &c., &c.

Flush Registers, from 4½d. per in. and upwards.
Bright ditto, with Black and Bright Bars, 8s. 10s. and upwards.
Self-acting Kitchen Ranges, with Oven and Back Boiler, Wrought Bars, Fittings Bright:—

2 ft.	2 ft. 6 in.	4 ft.
8s. 6d.	8s. 10s.	4s. 6d.

All articles made on the premises and warranted, and delivered free of expense within five miles of London. Bell-hanging in superior style, bains to order, 3s. per bell.

TO BUILDERS and CARPENTERS.—Elliptic Stoves, double backs, 3d. per inch. Registers, 4½d. 5d. per inch.

Cottage Ranges, with Ovens and Boilers, 2 ft. 3 in., 4s.; 2 ft. 6 in. 4s.; 3 ft. 3 in., 44s.

Bell-acting Ranges, with Circular Oven and Back Boiler.

Iron Fought Bars and Bright Fittings.		
2 ft., £4 2s.	2 ft. 6, £4 12s. 6d.	4 ft., £4

Best Patent Cut Clasp.

4½d.	5d.	7d.	1d. 3d.	1s. 3d. per 1,000.
5d.	6d.	8d.	1d.	20d.

Best Sheet Floor Brads 12s. per cwt.
Best Town Glue 22s. Do. Scotch, 26s. per cwt.

Best Patent Sash Lines.

4s. 3d.	4s.	6s. 6d.	7s. 6d.	10s.	12s. per gross.
1	2	3	4	5	6

ALF. R. WILLIAMSON IRONMONGERY and STOVE WAREHOUSE, 33, Chiswell-street, Finsbury-square.

Lists of Prices had on application at the Warehouse, or by letter pre-paid inclosing postage stamp.

N.B. Warehouse closes at Seven o'clock.

TO ARCHITECTS, BUILDERS, &c.

R. HENLY and Co., WHOLESALE IRONMONGERS, and Manufacturers of KITCHEN-RANGES, STOVES, &c., 181, Blackfriars-road, and 107, Union-street, Borough.

Bloomy Self-acting Kitchen Ranges, with Back Boiler and Oven, and Wrought Bars:—

2 ft.	2 ft. 3 in.	2 ft. 6 in.	2 ft. 9 in.	4 ft.
£3 6s.	£3 12s.	£3 18s.	£4	£4 14s.

Hetley's Patent Improved, with back Boiler and Wrought Iron Oven:—

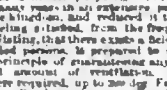
2 ft.	2 ft. 3 in.	2 ft. 6 in.	2 ft. 9 in.	4 ft.
£3	£3 12s.	£3 18s.	£4 10s.	£7.

Best Register Stoves, 4d., 5d., and 6d. per inch.
Do. Elliptic do., 4d. 4½d., and 5d. do.
Manufacturer of WOLFANTON'S PATENT REGISTER STOVES, a certain cure for SMOKY CHIMNEYS, and effecting a great saving in fuel. To be seen in use daily.

Orders from the Country, accompanied with a remittance or reference, will meet with prompt attention.

BURBIDGE and HEALY, 130, FLEET-STREET, LONDON, beg respectfully to inform the Building Public that they fit up COOKING ARRANGEMENTS for large Mansions, with patent appliances on scientific principles, which ensure greater economy and efficiency than hitherto attained. Also HOT WATER APPARATUS, upon improved and scientific principles, which they recommend for its peculiar adaptability for the Warming of Mansions, &c.

They fit up Lavatories with Hot Water Apparatus, for Dressing in a cleanly, expeditious, and safe manner. They also fit up BATHS with elegant arrangements, with every modern scientific improvement. Also Apparatus for the plentiful supply of Hot Water for Baths and general use of Mansions and large establishments.

WALKER'S  PATENT

WARMING and VENTILATING WORKS, LOWER KING-STREET, MANCHESTER.—Established for the manufacture, by machinery, of various descriptions of approved apparatus for warming and ventilating all kinds of buildings by STEAM, HOT-WATER, and WARM AIR, and for the economical application of heat generally in manufacturing and domestic purposes.—The proprietor having been engaged for many years in an extensive practice of this art in various parts of the kingdom, and reduced it to certain and accurate data, and feeling satisfied, from the frequency of failure in warming and ventilating, that there exists a field for the operations of properly qualified persons, is prepared to undertake works of this kind, on the principle of guaranteeing any required temperature and stated amount of ventilation. Drying-rooms and hot-houses, where required, up to 300 deg. Fahrenheit, and detailing operations generally planned and executed on improved principles. Having also bestowed much attention to reducing the expense and cumbrous nature of ventilating arrangements, he refers public notice to the following highly useful, compact, and well-tried inventions:—

Walker's Patent HEAT-BOXES.
Walker's Patent Portable SELF-FEEDING BOILERS, improved SURE-W-WARMING and VENTILATING MACHINES.
Walker's Patent HOT WATER STOVES.
Walker's Patent Tubular and other WARM-AIR STOVES.
Walker's Patent Portable Steam-Engines of useful sizes, with cylindrical or tubular boilers.

Competent workmen sent to any part of the country. References to numbers of public institutions, churches, nobility and gentry, architects, manufacturers, &c., throughout England, Ireland, Scotland, and Wales.

FIRE-PROOF DWELLING-HOUSES, &c.—This important desideratum is secured by the use of Dr. FOX'S PATENT FIRE-PROOF FLOORS and CEILINGS, which are applicable to private houses generally, as well as to all descriptions of public buildings, warehouses, manufactories, &c. The attention of the public is solicited to this valuable invention, by the use of which the ravages of fire are eventually prevented, while the expense does not exceed that of the ordinary mode of construction; and the proprietors of the Patent are prepared to furnish every information and assistance required for its adoption, and to guarantee the successful application to old as well as to new buildings.—Further particulars may be obtained on application to the Proprietors, Messrs. FOX and BARRETT, Leicester Chambers, 46, Leicester-square.

PAPER-HANGINGS, CHEAPEST IN LONDON.—Builders, the Trade and Country Dealers, may select from a Stock of 20,000 Pieces, of the newest designs, French and English Bedrooms, 4d. per yard; Satins, 8d. per yard; Flocks, 6d. per yard. Patterns for approval sent in town or country; and goods forwarded free of expense. A large discount allowed on taking a quantity. Panel decorations, flowers, or oaks remarkably cheap. Terms cash. Established twenty years. W. CROSBY, 32, Leather Arcade, Charing Cross.

PAPER-HANGINGS, MANUFACTURED UNDER HER MAJESTY'S ROYAL LETTERS PATENT.

E. T. ARCHER, 451, Oxford-street, solicits an inspection of the Season DECORATIVE PAPERS, fitted up in panels on the walls of the extensive suite of apartments, built expressly for that purpose; where also is kept an extensive stock of every variety of Paper-hangings, at the lowest possible prices and of the best manufacture in English and French Designs, by the best artists; and where may be had a large assortment of French and other Continental Paper-hangings always on hand.—Builders and large Consumers are particularly invited to the above.—451, Oxford-street.

VASES.—To Noblemen and Gentlemen requiring VASES and GARDEN ORNAMENTS—J. M. BLASHFIELD, Commercial-road, Lambeth, has a few fine Vases, Pedestals, &c., &c., which are to be disposed of at a very moderate price; they are manufactured in the best manner, and will stand frost.

J. MASON begs to call the attention of the Nobility and Gentry to his superior Collection of Terrace Pieces, Garden and Pleasure Ground Vases, Flower Pots, Fountains, &c. &c. Also Architects, Surveyors, and Builders to a great variety of Perforated Ornaments, for Parapets, Balconies, Terraces, and Garden Walls, Capitals, Trusses, Consoles, Chimney Shafts and other Ornaments, &c. Coats of Arms finished in a superior manner, all at half the usual price.—38, Providence-row, Finsbury-square, from Albion Wharf, Blackfriars-bridge.

ENCAUSTIC, VENETIAN, BATH, and other PATENT TILES, and MOSAIC PAVEMENTS, may be obtained in great variety at MINTON and Co.'s Warehouse, 8, Albion-place, Surrey side of Blackfriars bridge, and at their Manufactory, Stoke-upon-Trent, Staffordshire. N.B. Slabs and Tiles for Floor-laces, plain and ornamental; Door Furniture, &c.

TO BRICK AND TILE MAKERS.

THE AINSLIE BRICK and TILE MACHINE COMPANY (James Smith, Esq., of Deanston, Chairman) invite attention to their improved Brick and Tile Machines, which are to be seen at work at Alperton, and at the Company's office, 103a, Fenchurch-street, from Ten a.m. to Five p.m. Mr. Robert Berry, Secretary, who has been appointed manager in the room of Mr. John Ainslie, will show the machines at the works at Alperton, which is within a mile of the sanitary station of the London and North-Western Railway, and two miles of the Ealing station of the Great Western Railway; also at the Polytechnic Institution, Regent-street, London.—All communications to be addressed to Mr. WILLIAM ROBINSON, Secretary, at the office of the Company, London, 103a, Fenchurch-street. March 1, 1847. These machines may also be seen at Mr. Stubbs's, Lamb-walk, Edinburgh; Mr. Robert Boyle's, Ayr; Mr. Lawrence Hills, 132, Portland-street, Glasgow; Mr. Robert Charles, Millhill, Leeds; Messrs. Penny and Finch's Pentbridge, Staffordshire; Messrs. Drummond and Sons, Dublin; and Mr. John Gibson, Newton Limavady, County Derry.

TO ARCHITECTS AND BUILDERS.

JENNINGS'S WATER-CLOSETS have given the greatest satisfaction to all who have tried them; they are most simple in their construction. The water is retained in the basin by the compression of an elastic tube, the raising of the closet handle releases the tube, and the water rushes with force from the basin through the tube direct into the trap. As no container, or valve chamber, is required in the construction of this closet, all disjointment of impure air is avoided when the closet is used.

JENNINGS'S INDIA-RUBBER TUBE COCKS have been tried in Government and other Works, and found to answer most satisfactorily.

The charge for JENNINGS'S WOOD SHUTTER SHOE and FASTENER is 10s. per Shutter, about half the cost of the ordinary Bar.

Apply at 33, Great Charlotte-street, Blackfriars-road.

SNOXELL'S PATENT SAFETY REVOLVING WOOD SHUTTER, Manufactory, 98, REGENT-STREET and 33, CHANCERY LANE. Patent sealed on the 4th day of February, 1845, for Improvements in Revolving Shutters of WOOD and IRON, consisting of Six Methods of Raising and Lowering Shutters, with or Machinery, and Two for Hinging and Sheathing the Edges of Wood Laths with Iron.—The Patentee having fixed up some hundreds, will feel pleasure in forwarding the Testimonials of Architects, Principals of large Establishments, and others, having them now in use, which fully guarantee the Patentee in stating they are less and decidedly superior to any other Revolving Shutter for durability, security, and simplicity, with not the one of one screw, screw gear, or any other complicated machinery employed by other makers.

BUNNETT and CORPE, ENGINEERS, Patentees of REVOLVING IRON AND WOOD SAFETY SHUTTERS, and of ORNAMENTAL METALLIC SASH BARS, MOULDINGS, &c. IN BRASS, COPPER, ZINC, &c. FOR SHOP-FRONTS, SKY-LIGHTS, &c.

Shop-fronts completely fitted and fixed in a superior style, either plain or ornamental, also glazed with best plate glass, strong moulded sashbars handsomely enriched. Metal works and machinery of all kinds in connection with banking houses, shops, warehouses, &c. &c.

B. and C. challenge competition as to either quality or price.

Designs furnished and estimates given.

IMPROVED PATENT BENCH AND FLOORING CRAMPS FOR BUILDERS.

SOLE LICENCEES FOR MARVIN and MODDEN'S PATENT DIAGONAL SHEATHING.

Office of the Patentees, 38, Lower-road-street, London; and at the Works, Deptford, S.end.

PATENT CONVEX REVOLVING IRON SHUTTERS, recently manufactured, under licence, by the late firm of M. EDWARDS and Co., Old-street.

HARCOURT QUINCEY, Patentee.

CLARK and Co., Manufacturers, beg to call the attention of Architects, Builders and others to the IMPORTANT IMPROVEMENTS in the above Shutters, and inspection invited at their Manufactory, 128, Wapping, or at their Agents, 38, New Oxford-street. The great importance of strength and stiffness in the laths of REVOLVING IRON SHUTTERS, in allowing increased security, is obvious, and it is only necessary to mention the fact, that the patent convex laths are twelve times stronger than the ordinary flat laths, to insure their general adoption.

CLARK and Co. also invite attention to their greatly improved gearing, for raising and lowering the vertical chainbers, which, presenting all the advantages of the endless screw, worm and wheels, cannot, even by wear, be liable to run down, and entirely avoids the necessity of using the ratchet wheel, and is at once simple and thoroughly effective, and is SAFER and MORE DURABLE than any gear yet adopted for that purpose, from two patents for Revolving Shutters the SAFEST and MOST EFFECTIVE in use. These shutters are hung horizontally (either above or below the window or door), or vertically, for which position the greatly increased strength of the convex laths renders them peculiarly suitable; and one is applied to a counter, hung by wire, any day after Four o'clock at the Britannia Life Assurance office, corner of Princes-street, Bank.

CLARK and Co. are the SOLE MANUFACTURERS of REVOLVING SHUTTERS, WITH CONVEX IRON LATHS. Engravings and Prospectuses forwarded on application. IMPROVED DRAWN METALLIC SASH BARS, ASTRAGALS, MOULDINGS, STALL-BOARD PLATES.

Steam Engines always on hand. Sawing and Planing Machinery of every description made to order. Wrought-iron Bars and Cast Iron Girders for bridges, buildings, &c.—CLARK and Co., Engineers, 128, Wapping, or at 38, New Oxford-street, and 4, Moorgate-street, City.